Appl. No. 10/601,687
Atty. Docket No. Serie ED0101

Amdt. dated September 7, 2010
Response to FOA of June 7, 2010

REMARKS / ARGUMENTS

In complete response to the Final Office Action dated June 7, 2010, on the above identified application, reconsideration is respectfully requested.

With this amendment, claims 1 and 5 are amended with basis found in at least the original claims 1 and 5. Applicants submit that the amendments do not introduce new matter. Further, Applicants are not conceding in this application that those amended (or canceled) claims are not patentable over the art cited by the Examiner, as the present claim amendments and cancellations are only for facilitating expeditious prosecution of the claimed subject matter. Applicants respectfully reserve the right to pursue these (pre-amended or canceled claims) and other claims in one or more continuations and/or divisional patent applications.

Claims 1-10, 12, and 14-23 remain pending in this application.

Claim Rejection under 35 U.S.C. § 103:

Claims 1-6 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodosky et al. (U.S. Publication Number: 2003/0184595) ("Kodosky"), in view of Wewalaarachchi et al. (U.S. Publication Number 2002/0193888) ("Wewalaarachchi"). Applicants respectfully disagree.

The Examiner bears the initial burden of establishing a prima facie case of obviousness. See MPEP § 2141. Establishing a prima facie case of obviousness begins with first resolving the factual inquiries of *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The factual inquiries are as follows:

(A) determining the scope and content of the prior art;

(B) ascertaining the differences between the claimed invention and the prior art;

(C) resolving the level of ordinary skill in the art; and

(D) considering any objective indicia of nonobviousness.

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Once the Graham factual inquiries are resolved, the Examiner must determine whether the claimed invention would have been obvious to one of ordinary skill in the art.

Respectfully, Applicants submit that the Examiner has not properly characterized the teachings of the references and/or the claims at issue. Accordingly, a prima facie case of obviousness has not been established.

The first limitation of the claimed apparatus of independent claims 1 and 5 is:

> a plurality of controllers, each controller being dedicated to a corresponding one of a plurality of devices, respectively, wherein each dedicated controller is specifically configured to provide the device to which the controller is dedicated with control and data functions to adapt the device to be capable of interacting with other of the devices in an equipment network, wherein each one of said plurality of devices includes device configuration software specifically adapting the device for creating or updating device configuration data, the device configuration data including a description of the device and a representation of interconnection and interaction of the device with other ones of said plurality of devices.

To reject this limitation, the Examiner states:

> a plurality of controllers (e.g., controllers) (see Paragraph [0003]), for providing each with control and data functions for interacting with other of the devices in an equipment network (e.g., plurality of network-based devices) (see Paragraph [0003]), wherein each one of said plurality of devices includes device configuration means for creating or updating device configuration data (e.g., configuration dialog useful in creating a configuration diagram; discover or manually add new devices) (see Paragraph [0192]), the device configuration data including description of the device (e.g., configuration dialog for creating and specifying a configuration diagram) and representation of interconnection and interaction of the device with other ones of said plurality of devices (e.g., discovering devices connected within the system) (see Paragraph [0295]):

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The cited paragraph [0003] discloses:

> [0003] Measurement and automation systems are moving toward computer based systems wherein a computer system performs much of the processing, analysis, or control for measurement and automation applications. Measurement and automation systems are also moving toward network-based or distributed systems, wherein a plurality of network-based devices operate together to perform a desired measurement and/or automation function. Various new intelligent devices are also starting to appear in measurement and automation systems, such as smart sensors, smart cameras, smart motion control devices, smart distributed data acquisition devices, computer based instrument cards, PXI and VXI systems which may include intelligent controllers or reconfigurable devices, programmable logic controllers (PLC's), etc.

While paragraph [0003] discloses in general the use of various "intelligent devices" there is no disclosure of the above-referenced claim limitation. More particularly, paragraph [0003] does not disclose:

> a plurality of controllers, each controller being dedicated to a corresponding one of a plurality of devices, respectively, wherein each dedicated controller is specifically configured to provide the device to which the controller is dedicated with control and data functions to adapt the device to be capable of interacting with other of the devices in an equipment network, wherein each one of said plurality of devices includes device configuration software specifically adapting the device for creating or updating device configuration data, the device configuration data including a description of the device and a representation of interconnection and interaction of the device with other ones of said plurality of devices.

The cited paragraph [0192] discloses:

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[0192] In step 222 the computer system 82 may display a graphical user interface, such as a configuration dialog, which may be useful in creating a configuration diagram. An exemplary configuration dialog is shown in FIG. 14. The configuration dialog may have various appearances, and FIG. 14 is an exemplary embodiment. The configuration dialog may include various tabs, may include the ability to discover or manually add new devices, and may visually display the various devices present (or "virtually present") in the distributed system. The configuration dialog may include the ability to discover or manually add new programs, and may visually display the various program present (or "virtually present") in the distributed system. The configuration dialog may also include the ability to discover or manually add I/O channels, data points, or other items relevant to the system. In one embodiment where the configuration diagram is mostly or completely automatically or programmatically created, the configuration dialog may not be displayed.

While paragraph [0192] discloses the GUI of a computer system having a configuration dialog, there is no disclosure of the above-referenced claim limitation.

The cited paragraph [0295] discloses:

[0295] FIG. 14 illustrates one embodiment of a configuration dialog for creating or specifying a configuration diagram. FIG. 14 illustrates a configuration dialog or user interface panel which is used for detecting or discovering devices connected within the system. As noted above, the computer system 82 may act as the central console of the distributed system, and may operate to execute software which displays the configuration diagram, as well as the configuration dialog used in configuring the configuration diagram.

Once again, while paragraph [0295] discloses configuration dialog, there is no disclosure of the above-referenced claim limitation.

Accordingly, at least for this reason, the Final Office Action fails to establish a prima facie case of obviousness. Withdrawal of this rejection is respectfully requested.

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The third limitation of the claimed apparatus of claim 1 is "means connected between said computer network of said plurality of controllers, respectively, for transferring data and/or control signals between individual ones of said plurality of controllers and said computer network at given times".

To reject this limitation, the Examiner states:

> means connected between said computer network and said plurality of
>
> controllers, respectively, for transferring data and/or control signals between individual
>
> ones of said plurality of controllers and said computer network at given times (e.g.,
>
> signals, data or phenomena that is being transferred between the devices) (see
>
> Paragraph [0217]); and

The cited paragraph [0217] discloses:

> [0217]   For example, where the link icon indicates the type of information flow, if the user is connecting a device icon representing a laser to a device icon representing a mirror or other optical device, when the user associates the first device icon with the second device icon (e.g., by clicking on the first device icon and dragging the cursor to the second device icon to create the connection), the configuration diagram may automatically draw a laser beam connection, i.e., a connection icon which has the appearance of a laser beam or optical signal. This visually indicates to the user the type of data or signals that are being passed between the devices. Alternatively, in a measurement, automation or simulation application, when the user connects a tank icon representing a tank to, for example, a valve icon representing a valve, the diagram may automatically draw the connection with the appearance of a pipe to visually indicate to the user the type of signals, data or phenomena that is being transferred between the devices.

Applicants respectfully submit that this citation is not related in any way to the claim limitation. For this reason alone, the present rejection should be withdrawn.

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The Final Office Action acknowledges that Kodosky does not disclose dedicated controllers and relies upon Wewalaarachchi as disclosing "each controller being dedicated to a corresponding one of a plurality of devices, respectively in paragraph [0002]…". The cited paragraph [0002] states:

[0002] Computerized systems for monitoring, diagnosing, operating and controlling the operations of a wide variety of facilities, including factories, power plants, warehouses, office buildings and apartment buildings, are known. In such Supervisory Control and Data Acquisition (SCADA) systems, microprocessor devices convert device measurement and status inputs into computer data for logging and transmission to higher level processors. These supervisory processors make strategic decisions for the operation of a subsystem or subsystem device and send out set points to dedicated controllers which will make the changes to actuators and ultimately the process. The SCADA network therefore connects to many controllers and field devices to gather information and make global decisions. These SCADA systems typically integrate a large number of control devices through a number of diverse control networks. For example, there may be security, fire protection, heating, cooling, electrical and elevator control systems. U.S. Pat. No. 6,067, 477 describes a method and an apparatus for providing an object-oriented frame work for the development of personalized workflow applications that provide real time SCADA functionality, while maintaining scalability to any number of users and integration with existing applications and systems. More specifically, U.S. Pat. No. 6,067,477 describes a computer integrated SCADA system for managing distributed field devices that control or monitor physical or logical entities and for providing users the ability to construct personalized SCADA applications. The computer controlled system provides real time continuous operational control by monitoring data received from one or more remote device sensors and actuating at least one of the plurality of control devices based on input from said remote sensors.

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The "controllers" referenced by the Final Office Action "make changes to actuators and ultimately the process" (emphasis added). Therefore, the "controllers" of Wewalaarachchi are not the claimed controllers because they do not "adapt the device to be capable of interacting with other of the devices in an equipment network" in accordance with the limitations of independent claims 1 and 5. Additionally, contrary to the assertion in the Final Office Action, nothing in paragraph 0002 of Wewalaarachchi discloses the controller being dedicated to a corresponding device, such as one actuator. For this reason alone, the present rejection should be withdrawn.

Finally, the Final Office Action begins with Examiner Notes which state the rule that structures are not made patentably distinct by reciting an intended purpose. Applicant appreciates the Examiner's effort to frame the Examiner's basis of rejection. However, the Final Office Action fails to tie this legal point to the specific claim language which the Examiner discounts. As the rejection of the claims appears to account for all of the elements in the claims, Applicants are not certain as to the relevancy of the Examiner Notes to the rejection at hand. In an attempt to advance prosecution, Applicant has scoured the claim language and reformated limitations in explicit terms of structure, where arguably the claims may have been viewed as identifying an intended use.

For at least all of the reasons cited above, a prima facie case of obviousness has not been established for independent claims 1 and 5. Accordingly, the rejection thereof should be withdrawn.

Claims 2-4, 6, and 21-23 are ultimately dependent upon claims 1 and 5, which have been shown allowable above. Therefore, since claims 2-4, 6, and 21-23 introduce additional subject matter, Applicant submits that the recitations of claims 2-4, 6, and 21-23 are not rendered obvious by the combination of Kodosky and Wewalaarachchi and respectfully request that claims 2-4, 6, and 21-23 be passed to allowance.

As stated in the last response, claim 1 recites a SCADA system in which the devices are self-aware of their own type, as well as their interconnection and

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interaction with other devices in the system. In contrast, for the reasons provided in the last response, Kodosky teaches a system in which the devices are aware of their own type, but not of their interaction and interconnection with other devices and the system. Similarly, Wewalaarachchi discloses a method of using an as-built drawing to configure a SCADA system (Abstract). It does not appear that the devices in Wewalaarachchi are even aware of their own type, never mind their interaction and interconnection with other devices and systems.

Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

CONCLUSION

Accordingly, it is believed that the present application now stands in condition for allowance. Early notice to this effect is earnestly solicited. Should the Examiner believe a telephone call would expedite the prosecution of the application, he is invited to call the undersigned attorney at the number listed below.

Respectfully submitted,

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